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PATENT APPLICATION

Docket: 16546.1.2



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Brent Vernon, et al.	)	)
Serial No.	10/554,046	)
Filed:	October 21, 2005	)
For:	IN SITU GELLING SELF-REACTIVE MATERIALS FOR EMBOLIZATION	)
Customer No.:	022913	)

Art Unit  
Not yet known

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. § 1.97

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). While no representation is made that any of these references may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to fully comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record

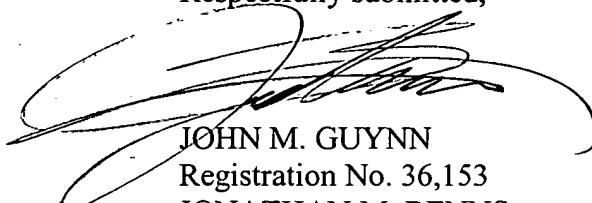
believes that the enclosed art is the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each of the listed foreign and publication references or relevant portion thereof is also enclosed.

In accordance with 37 C.F.R. § 1.98(c), all English translations within the possession, custody, control or availability of anyone designated in 37 C.F.R. § 1.56(c) of each nonenglish reference, if any, are also enclosed.

DATED this 13 day of February 2006.

Respectfully submitted,



JOHN M. GUYNN  
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JMB:mla

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Customer No.: 022913 )

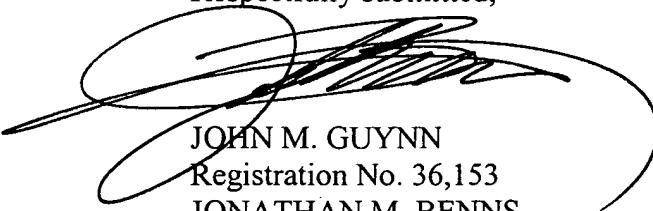
CERTIFICATE OF MAILING BY "EXPRESS MAIL"

I hereby certify that following documents are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated below in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Date of deposit: February 13, 2006.

- Information Disclosure Statement
- Form PTO-1449 listing 31 references
- Legible copies of foreign and publication references
- Transmittal Letter
- Postcard

Respectfully submitted,



JOHN M. GUYNN  
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Att'y Docket No. 16546.1.2  
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### INFORMATION DISCLOSURE CITATIONS MADE BY APPLICANT

#### U.S. Patent Documents

<u>Examiner Initial*</u>	<u>Document Number</u>	<u>Issue Date</u>	<u>Name</u>
____ 1	6,475,516	Nov. 5, 2002	DiCosmo et al.
____ 2	6,463,317	Oct. 8, 2002	Kuckarczyk et al.
____ 3	6,342,202	Jan. 29, 2002	Evans et al.
____ 4	6,312,421	Nov. 6, 2001	Boock
____ 5	6,299,619	Oct. 9, 2001	Greene, Jr. et al.
____ 6	6,245,090	June 12, 2001	Gilson et al.
____ 7	6,165,193	Dec. 26, 2000	Greene, Jr. et al.
____ 8	6,152,943	Nov. 28, 2000	Sawhney
____ 9	6,113,629	Sep. 5, 2000	Ken
____ 10	6,096,021	Aug. 1, 2000	Helm et al.
____ 11	6,066,325	May 23, 2000	Wallace et al.
____ 12	5,823,198	Oct. 20, 1998	Jones et al.
____ 13	5,667,767	Sep. 16, 1997	Greff et al.
____ 14	5,514,379	May 7, 1996	Weissleder et al.

Examiner: \_\_\_\_\_ Date Considered: \_\_\_\_\_

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609, draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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<input type="checkbox"/> 15	5,356,432	Oct. 18, 1994	Rutkow et al.
<input type="checkbox"/> 16	4,978,619	Dec. 18, 1990	Kajiwara et al.
<input type="checkbox"/> 17	4,881,825	Nov. 21, 1989	Olesen

#### Foreign Patent Documents

Examiner <u>Initial*</u>	Document <u>Number</u>	Publication <u>Date</u>
<input type="checkbox"/> 18	WO2004/096152	Nov. 11, 2004

#### Other Documents (including author, title, pertinent pages, etc.)

Examiner  
Initial\*

- 19 Becker, T. et al., Calcium Alginate Gel: A biocompatible and mechanically stable polymer for endovascular treatment. Journal of Biomedical Materials Research, Vol. 54 (2001), pp. 76-86.
- 20 Becker, T. et al., Flow properties of liquid calcium alginate polymer injected through medical microcatheters for endovascular embolization. Journal of Biomedical Materials Research, accepted Dec. 19, 2001, pp. 533-540
- 21 Hillman, J., Population-based analysis of arteriovenous malformation treatment. J. Neurosurg. 2001 Oct; 95(4):633-637.
- 22 Irie, K. et al., Treatment of arteriovenous malformation of the brain -preliminary experience. J. Clin. Neurosci. 2000 Sep; 7 Supple 1:24-29.

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- \_\_\_\_\_ 23 Jizong, Z., et al., Combination of intraoperative embolisation with surgical resection for treatment of giant cerebral arteriovenous malformations. *J. Clin. Neurosci.* 2000 Sept; 7 Suppl. 1:54-59
- \_\_\_\_\_ 24 Li, Xiaowei, et al., Thermosensitive N-isopropylacrylamide – N-propylacrylamide-vinyl pyrrolidone terpolymers: Synthesis, characterization and preliminary application as embolic agents. *J. Biomaterials* 2005.05.094.
- \_\_\_\_\_ 25 Liu, H.M., et al., Embolization of cerebral arteriovenous malformations with n-butyl-2-cyanoacrylate. *J. Formos.Med. Addoc.* 2000 Dec: 99(12):906-913.
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- \_\_\_\_\_ 27 Vernon, B. et al., Water-borne, *in-situ* Cross-Linked Biomaterials from Phase Segregated Precursors, 2003 Wiley Periodicals, Inc. *J Biomed Mater Res* 64A: 447-456, 2003.
- \_\_\_\_\_ 28 Wallace, R. et al., Brain Arteriovenous Malformations. *Neuroimaging Clin. N. America.* 1998 May; 8(2): 383-99.
- \_\_\_\_\_ 29 Wallace, R. et al., The Safety and Effectiveness of Brain AVM Embolization using Acrylic and Particles: The Experience of a Single Institution. *Neurosurgery.* 1995 Oct; 37(4): 606-18.
- \_\_\_\_\_ 30 Wuyts FL, Vanhuyse VJ, Langewouters GJ, Decraemer WF, Raman ER, Buyle S. Elastic properties of human aortas in relation to age and atherosclerosis: a structural model. *Phys Med Biol.* 1995 Oct;40(10):1577-97.
- \_\_\_\_\_ 31 Zhao, Chengru, et al., A new thermosensitive polymer as nonadhesive liquid embolism material, *Current Applied Physics*, 5 (2005), 497-500.

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### References Cited by Applicants

While the filing of Information Disclosure Statements is voluntary, the procedure is governed by the guidelines of Section 609 of the Manual of Patent Examining Procedure and 37 C.F.R. §§ 1.97 and 1.98. To be considered a proper Information Disclosure Statement, Form PTO-1449 shall be accompanied by a copy of each listed patent or publication or other item of information and a translation of the pertinent portions of foreign documents (if an existing translation is readily available to the applicant), an explanation of relevance of each reference not in the English language, and should be submitted in a timely manner as set out in MPEP Sec. 609.

Examiners will consider all citations submitted in conformance with 37 C.F.R. § 1.98 and MPEP Sec. 609 and place their initials adjacent the citations in the spaces provided on this form. Examiners will also initial citations not in conformance with the guidelines which may have been considered. A reference may be considered by the Examiner for any reason whether or not the citation is in full conformance with the guidelines. A line will be drawn through a citation if it is not in conformance with the guidelines AND has not been considered. A copy of the submitted form, as reviewed by the Examiner, will be returned to the applicant with the next communication. The original of the form will be entered into the application file.

Each citation initialed by the Examiner will be printed on the issued patent in the same manner as references cited by the Examiner on Form PTO-892.

The reference designations "A1," "A2," etc. (referring to Applicant's reference 1, Applicant's reference 2, etc.) will be used by the Examiner in the same manner as Examiner's reference designations "A," "B," "C," etc. on Office Action Form PTO-1142.

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